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A STUDY TO DETERMINE THE EFFECT OF OLIGOHYDRAMNIOS AT TERM ON THE PERINATAL AND MATERNAL OUTCOME

Obstetric & Gynecology

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ABSTRACT

Background: Oligohydramnios is a state of deficient amniotic fluid defined sonographically as single deepest vertical packet < 2cm / or Amniotic fluid index < 5cm **Objective:** - Aim of the study to find out perinatal and maternal outcome in term oligohydramnios. **Method:** - A study was done on 50 pregnant women with AFI < 5cm with intact membrane in obst. and gyne department of DMCH. Oligohydramnios was confirmed by AFI from USG report. **Result:** - Out of 50 patient, 25 cases of Oligohydramnios are associated with risk factor like PIH, IUGR, Fetal anomaly etc. LSCS was done in 35 cases with AFI < 5cm, Low birth weight was found in 26 cases with AFI < 5cm, NICU admission was required for 15 cases with AFI < 5cm. **Conclusion:** - Pregnancies with Oligohydramnios (AFI<5cm) beyond 37 weeks are associated with fetal distress Increased rate of LSCS (due to fetal distress), Low birth weight, Meconium-stained Liquor, Low Apgarscore, NICU admission etc.

KEYWORDS

INTRODUCTION

- Amniotic fluid is the fluid that collects within the amniotic cavity, surrounding the Embryo. It is elaborated by amnion, a 2 layered extra embryonic membrane formed by inner ectoderm and outer somatic mesoderm.

Assessment Of Amniotic Fluid Done Sonographically By:-

Single deepest vertical pocket of fluid	Amniotic fluid index
Considered normal if value is > 2 cm and <8 cm	Is the sum of single deepest vertical pocket from all 4 quadrant
	Value is considered normal if >5 cm and <25 cm
Using either technique, a fluid pocket must be atleast 1 cm in width and fluid pocket should be free of fetal parts and umbilical cord.	

AIM OF STUDY

To study the perinatal and maternal outcome in term oligohydramnios.

MATERIALAND METHODS

A prospective observational study was conducted in Dept. of Obst and Gynae in DMCH from Jan 2021-Jan 2022. The study was conducted with 50 subjects with term gestation with AFI < 5 cm who had attended the antenatal OPD and were subsequently admitted for Labour and delivery during study period.

Inclusion Criteria

- Singleton pregnancy with gestational age >37 weeks.
- Pregnancy without anomaly with intact membrane.

Exclusion Criteria

- Singleton pregnancy with gestational age <37 weeks.
- Multiple pregnancy
- Fetal having congenital anomaly
- Ruptured membrane
- Polyhydramnios

METHOD

Study was conducted to observe outcome of labour in the form of perinatal morbidity and maternal outcome in form of vaginal and cesarean section.

Outcome Measure Were:-

- CTG changes
- Mode of delivery
- Presence of meconium
- APGAR Score at 5 min

Primary Outcome

Fetal distress as defined by any one or more of the following criteria.

1. Recurrent variable deceleration
2. Late deceleration
3. Prolonged bradycardia
4. APGAR Score <6 at both 1 and 5 min.

Secondary Outcome

- Mode of delivery – Cesarean section for fetal distress
- Meconium staining of amniotic fluid
- NICU admission
- Still birth

RESULT

Age group	No. of Patients
<20 yr	04
20-30 yr	38
>30 yr	08
Total	50
Parity	**No. of Patients**
Primigravida	28
Multigravida	22
Perinatal outcome	**Percentage**
Meconium stained	24%
CTG abnormal	18%
Low birth wt (<2.5 kg)	20%
APGRA score at 1 min <6	8%
5 min<6	6%
NICU admission required	24%
Still birth	2%
Neonatal death	2%

Maternal Outcome

Mode of delivery	Percentage
LSCS	42%
Vaginal delivery	
Mode of onset of labour	**Percentage**
Induced	42%
Spontaneous	58%
Indication of LSCS	**Percentage**
Abnormal CTG	17%
Dystocia	4%
Fetal distress	20%
Failed induction	17%
Severe oligo	34%

It was found that, out of 50 patient, 25 cases were associated with risk factor like PIH, IUGR. LSCS was done in 29 cases due to abnormal CTG, fetal distress, dystocia, failed induction and severe oligohydramnios.

Low birth wt was found in 10 cases. APGAR score was low in 7 cases, MSL were 12. NICU admission required 12 cases.

CONCLUSION

- Oligohydramnios is one of the indicator of poor perinatal outcome. It is associated with fetal heart rate abnormality, meconium staining of amniotic fluid, umbilical cord compression, poor tolerance of labour, low apgar score, require NICU admission.
- It is associated with increased rate of cesarean section for fetal distress and failed induction.
- From out study, we conclude that patient with oligohydramnios require proper antenatal care, intensive fetal survelliance and intrapartum care for better perinatal outcome.

REFERENCES

1. Jagatia K. Singh, Patel S. Maternal and fetaloutcome in Oligohydramnios
2. Mishra R. Ian Donald's practical obstetrics problems (6th Edition)
3. Phelan JP, Smith CV, Broussard P, Small M. Amniotic fluid volume assessment with the four quadrant technique at 36-42 weeks gestation
4. Magann EF, Chauhan SP, Kinsella MJ, McNamara MF, Whitworth NS, Morrison JC. Antenatal testing among 1001 patients at high risk: the role of ultra sonographic estimate of amniotic fluid volume
5. Manning FA, Platt SP, Sipos L. Antepartum fetal evaluation, Development of a fetal biophysical profile